REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold font.

> **2. Claims 4,5, 12, 13, and 25 are rejected under 35 U. S. C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.**
>
> **According to claims 4 and 12, monitoring the number of data cells produced includes storing at least one data element concerning the data packet currently being processed if it is determined that another port contains a data packet available for processing, wherein this data element allows for subsequent processing of the remainder of the data packet currently being processed. This feature is not described in the specification in adequate detail. The specification therefore fails to enable one skilled in the art to make and use the invention as claimed without undue experimentation. Claims 5 and 13 depend on claims 4 and 12 and are therefore similarly rejected.**

The applicant respectfully disagrees.

An example is given on page 8, line 21 to page 9, line 10 as follows:

> "A cell monitoring process monitors 106 the number of data cells produces to determine if the user defined number of cells have been generated. Packet information storage process 52 is responsive to cell limit port switching process 48 determining that another port contains a data packet that is available for processing. Once it is determined that another port has a data packet available for processing, packet information storage process 52 stores various data elements 54 concerning the data packet currently being processed. These data elements 54 are stored on non-volatile memory 32. Data elements 54 can include information concerning: the overall length of the data packet currently being processed; the length of the packet remainder to be processed; the length of the portion of the packet that has already been processed; a packet truncation indicator showing that the packet has not been completely processed; or a Packet-Over-Sonet (POS) header for use in optical networks. Accordingly, by storing data elements 54 on non-volatile memory 32, subsequent fragmentation of the remainder of a data packet (not completely fragmented due to cell number limit 33) can be easily achieved."

> **According to claim 25, the port-switching event is an unbalanced port-loading**

condition.

The specification nowhere describes this feature. The specification therefore fails to enable one skilled in the art to make and use the invention as claimed without undue experimentation.

The applicant respectfully disagrees.
An example is given on page 10, line 17 to page 11, line 4 as follows:

> "If so, a cell limit port switching process initiates 108 the polling process to determine if any other port contains a data packet available for processing. If such a data packet is available for processing, a packet information storage process stores 110 at least one data element concerning the data packet currently being processed, where the data element allows for subsequent processing of the remainder of the data packet currently being processed. Further, if such a data packet is available for processing, a cell limit fragmentation switching process initiates 112 the packet fragmentation process to fragment the data packet on the other port into at least one data cell having a defined size, where the packet fragmentation process continues fragmenting the data packet on the other port into data cells until the user-defined number of cells are generated."

5. Claims 1-3,6-l 1, 14-24, and 26-34 are rejected under 35 U. S. C. 103(a) as being unpatentable over Patel et al. in view of Kothary and Davis et al.

With regard to claims 1, 9, 24, 26, 29, and 32, Patel et al. teaches a method, and switch for performing the method, wherein the method comprises polling, in a systematic fashion, a plurality of data ports connected to a network (abstract; column 3, lines 1 l-33). Patel et al. fails to teach that the polling is done for the purpose of determining whether a data packet is available at each port for processing; and the fragmenting of the available data packet into at least one data cell having a defined size; wherein this fragmentation continues until a user-defined number of cells are generated (which is a port switching event). Kothary teaches polling the input ports to determine whether they each have a packet or cell to send (column 8, lines 14-20). Kothary teaches fragmenting Ethernet packets into ATM cells (abstract). Davis et al. teaches the routing of no more than B packets during any switch cycle (abstract); the number of packets from any given input port is thus limited to B. It would have been obvious to one of ordinary skill in the art to modify the invention of Patel et al. so that the polling is done for the purpose of determining whether a data packet is available at each port for processing, as in Kothary, and the fragmenting of the available data packet into at least one data cell having a defined size, as in Kothary, wherein this fragmentation continues until a user-defined number of cells are generated, as suggested by Davis et al., because such an arrangement would enable the switch to forward data packets as cells when they are available to the switch, would prevent the switch from spending

disproportionately more time serving large packets, and would limit the required bandwidth of the network to which the switch is attached.

The applicant respectfully disagrees. Claim 1 includes "polling a plurality of data ports ... connected to a network to determine which port, if any, contains a data packet available for processing; and fragmenting the available data packet into at least one data cell having a defined size; wherein this fragmentation continues until a user-defined number of cells are generated."

Whether taken alone or in combination, the references do not teach or suggest the invention recited in the applicant's claim 1. The examiner states acknowledges that Patel doesn't describe these features: "Patel et al. fails to teach that the polling is done for the purpose of determining whether a data packet is available at each port for processing; and the fragmenting of the available data packet into at least one data cell having a defined size; wherein this fragmentation continues until a user-defined number of cells are generated (which is a port switching event)."

The examiner relies on Kothary to teach the fragmentation of packets into at least one cell. Kothary includes a segmentation unit, and as described in Kothary, "when the segmentation unit receives an Ethernet packet it converts it to an ATM transmission and forwards it" (col. 2, lines 62-64). As shown in FIG. 14, the segmentation unit receives an Ethernet frame at the input 32A and places the payload into a FIFO (first in first out) buffer 166. Thus, if multiple frames are received or available for segmentation, each frame will be segmented as a unit in the order it was received. Thus, Kothary fragments packets until the packet is completely fragmented and does not suggest fragmentation that "continues until a user-defined number of cells are generated" as in the applicant's claim 1.

It appears that the examiner relies on Davis to provide the feature of fragmentation that "continues until a user-defined number of cells are generated." However, as indicated by the examiner, Davis teaches the routing of no more than B packets during any switch cycle. Davis does not include segmentation of a packet or generation of cells. The examiner indicates that Davis' method would prevent the switch from spending disproportionately more time serving large packets, and would limit the required bandwidth of the network to which the switch is

attached. The applicant disagrees. Davis restricts the number of packets routed from a switch during a switch cycle; thus his constraint of B packets does not affect the time to forward a large packet and does not prevent the switch from spending disproportionately more time serving large packets.

Even if the cited references were combined, the combined references fail to teach each limitation of claim 1.

Claim 9 includes "a packet fragmentation process, responsive to said port polling process determining that one of said ports contains a data packet, for fragmenting said data packet into at least one data cell having a defined size; wherein said packet fragmentation process continues fragmenting said data packet into said data cells until a user-defined number of cells are generated." Claim 9 is patentable for reasons similar to claim 1.

Claim 21 includes "a packet fragmentation process, responsive to said port polling process determining the availability of said data packet on one of said plurality of ports, for fragmenting said data packet into at least one Asynchronous Transfer Mode (ATM) cell, wherein said packet fragmentation process continues fragmenting said data packet into said data cells until a user-defined number of cells are generated" and is patentable for reasons similar to claim 1.

Claim 24 includes "a packet fragmentation process, responsive to said port polling process determining that one of said ports contains a data packet, for fragmenting said data packet into at least one data cell; wherein said packet fragmentation process continues fragmenting said data packet into said data cells until a port-switching event occurs." As described above, in Kothary "when the segmentation unit receives an Ethernet packet it converts it to an ATM transmission and forwards it" (col. 2, lines 62-64). Korhary segments the cells based on their location in the buffer and does not include fragmenting "said data packet into said data cells until a port-switching event occurs" as in the applicant's claim 24.

Claim 29 includes a product including instructions to "fragment the available data packet into at least one data cell having a defined size; wherein this fragmentation continues until a user-defined number of cells are generated" and is patentable for reasons similar to claim 1.

Claim 32 includes a processor configured to "fragment the available data packet into at

least one data cell having a defined size; wherein this fragmentation continues until a user-defined number of cells are generated" and is patentable for reasons similar to claim 1.

With regard to claims 2 and 10 ...
With regard to claims 3 and 11 ...
With regard to claims 6 and 15 ...
With regard to claims 7 and 16 ...
With regard to claims 8 and 14 ...
With regard to claim 17 ...
With regard to claim 18 ...
With regard to claims 19 and 27 ...
With regard to claim 20 ...
With regard to claim 21 ...
With regard to claim 22 ...
With regard to claim 23 ...
With regard to claim 28, ...
With regard to claims 30 and 31 ...
With regard to claim 33 ...
With regard to claim 34 ...

Claims 2-8, 10-20, 22-23, 25-28, 30-31, 33, and 34 are patentable for at least the reasons the claims on which they depend are patentable.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 5/17/4

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